

Application No.: 09/656,309

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AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

This listing of claims will replace all prior versions, and listing, of claims in the application:

Claims 1 to 52 (canceled)

Claim 53 (previously presented): A method of generating a nucleic acid that encodes a polypeptide having a polymerase activity comprising:

obtaining a nucleic acid comprising a sequence as set forth in SEQ ID NO:1, or its complement;

modifying one or more nucleotides in said sequence to another nucleotide, deleting one or more nucleotides in said sequence, or adding one or more nucleotides to said sequence, to generate a variant nucleic acid that encodes a polypeptide having polymerase activity;

expressing the variant nucleic acid to generate a polypeptide; and

screening the polypeptide for a polymerase activity, thereby generating a nucleic acid encoding a polypeptide having a polymerase activity.

Claim 54 (currently amended): The method of claim 53, wherein the modifications are introduced by a method selected from the group consisting of error-prone PCR, shuffling, oligonucleotide-directed mutagenesis, assembly PCR, sexual PCR mutagenesis, *in vivo* mutagenesis, cassette mutagenesis, recursive ensemble mutagenesis, exponential ensemble mutagenesis, site-specific mutagenesis, ligation reassembly, Gene Site Saturation Mutagenesis (GSSM) Mutagenesis™ (GSSMTM) and any combination thereof.

Claim 55 (previously presented): The method of claim 53, wherein the modifications are introduced by error-prone PCR.

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**Claim 56 (previously presented):** The method of claim 53, wherein the modifications are introduced by shuffling.

**Claim 57 (previously presented):** The method of claim 53, wherein the modifications are introduced by oligonucleotide-directed mutagenesis.

**Claim 58 (previously presented):** The method of claim 53, wherein the modifications are introduced by assembly PCR.

**Claim 59 (previously presented):** The method of claim 53, wherein the modifications are introduced by sexual PCR mutagenesis.

**Claim 60 (previously presented):** The method of claim 53, wherein the modifications are introduced by in vivo mutagenesis.

**Claim 61 (previously presented):** The method of claim 53, wherein the modifications are introduced by cassette mutagenesis.

**Claim 62 (previously presented):** The method of claim 53, wherein the modifications are introduced by recursive ensemble mutagenesis.

**Claim 63 (previously presented):** The method of claim 53, wherein the modifications are introduced by exponential ensemble mutagenesis.

**Claim 64 (previously presented):** The method of claim 53, wherein the modifications are introduced by site-specific mutagenesis.

**Claims 65 to 107 (canceled)**

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